Torilis nodosa
Hedge parsley
Apiaceae

Plants are erect with few branches; 1 - 7 dm tall. Stems are retrorsely scabrous with leavels pinnately decompound, 0.5-2 dm long. Leaflets are bipinnately dissected, and umbels are solitary and short peduncled. Umbels are opposite the leaves, and involucres are lacking or consist of 1 bract. Fruits are ovoid, 3-5 mm long, the outer carpel hook bristly, the inner smooth or with tubercles. Occasionally found on open shaded hills below 2000 feet; naturalized from Europe (Hickman, 1993).

A leaf gall disease of *T. nodosa* was found in northwestern Arkansas during surveys for weed pathogens that might be developed as biological herbicides. The causel fungus was identified as *Protomyces macrosporus*, which is common in Europe, South Asia, and North Africa on many genera in the Umbelliferae. Symptoms of infection included distortion of affected tissue and chlorosis, but tissue that emerged from the crown of the plants after innoculation was not noticeably different in size, shape, or color. The pathogen failed to infect 10 other species of Apiaceae, so is apparently quite specific to hedge parsely (Valverde and Templeton, 1984).

Hedge parsely was found to be an unacceptable food for larvae of Black Swallowtail butterflied, which feed on a variety of native and introduced Umbelifferae (Finke and Scriber, 1988); larvae attempted to feed on these plants, but the trichomes on the surface of the leaves successfully prevented consumption. The authors speculate that this mechanical defense might be augmented by chemicals. Other herbivores might also find this weed unpalatable.

Literature cited:

Finke, M.D., and J.M. Scriber. 1988. Influence on larval growth of the Eastern Black Swallowtail butterfly *Popilio polyxenes* (Lepidoptera: Papilionida) of season changes in nutritional parameters of Umberlliferae species. Am. Md. Nat. 119: 45-62.

Hickman, J. C. (ed.). 1993. The Jepson manual: Higher plants of California. Berkeley: University of California Press. 1400pp.

Valverde, R., and G.E. Templeton. 1984. Leaf gall of *Torilis japonica* caused by *Protomyces macrosporus* in Arkansas. Plant Disease 68: 716-717.

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